

ABSTRACT OF THE DISCLOSURE

A transgenic non-human animal expressing at least one transgene including a DNA sequence encoding a heterologous Amyloid Precursor Protein (APP) including at least the Arctic mutation (E693G) and a further AD (Alzheimer's disease) pathogenic mutation or a further transgene affecting AD pathogenesis, which results in increased amounts of intracellular soluble A aggregates, including A peptides. The method of producing the transgenic animal, and methods of screening for therapeutic or diagnostic agents useful in treatment or diagnosis of Alzheimer's disease are also disclosed.